

Claims

1. (Currently Amended) A reconfigurable network-equipment power-management system, comprising:

a power-distribution apparatus having a power input disposed in the power-distribution apparatus and a communication interface disposed in the power-distribution apparatus for communicating with a remote user system;

a plurality of power-control outlets disposed in the power-distribution apparatus, the plurality of power-control outlets connectable in power supply communication with one or more separate electronic appliances;

a plurality of power-control relays disposed in the power-distribution apparatus, each of the plurality of power-control relays in power control communication with at least one among the plurality of power-control outlets, whereby the plurality of power-control outlets and the plurality of power-control relays provide operating power to the one or more separate electronic appliances are able to interrupt the operating power to the one or more separate electronic appliances;

a power-control outlet user configuration file accessible by the remote user system for affecting the plurality of power-control outlets, wherein the power-control outlet user configuration file comprises user configuration data for each of the plurality of power-control outlets disposed in the power-distribution apparatus;

a memory disposed in the power-distribution apparatus and having a power-control outlet user configuration file storage area; and

at least one power controller board disposed in the power-distribution apparatus, wherein the at least one power controller board corresponds to at least two of the plurality of power-control outlets, the at least one power controller board comprising a power-control outlet user configuration file transfer mechanism in communication with the communication interface accessible by the remote user system, whereby the power-control outlet user configuration file transfer mechanism imports and exports the power-control outlet user configuration file from the power-distribution apparatus to the remote user system via the communication interface.

2. (Currently Amended) The system of claim 1, further comprising:

a network software conversion agent in communication with a remote power manager at the remote user system, whereby the network software conversion agent converts software commands communicated as TCP/IP packets into signals that can be understood by the remote power manager.

3. (Currently Amended) The system of claim 1, further comprising:

a configuration upload command mechanism in communication with the power-control outlet user configuration file transfer mechanism, whereby the configuration upload command mechanism recognizes a user command to upload the power-control outlet user configuration file from the memory disposed in the power-distribution apparatus to a destination.

4. (Currently Amended) The system of claim 1, further comprising:

a configuration substitution command mechanism in communication with the power-control outlet user configuration file transfer mechanism, whereby the configuration substitution command mechanism recognizes a user command to download a substitute power-control outlet user configuration file to the memory disposed in the power-distribution apparatus from a source.

5. (Currently Amended) The system of claim 1, further comprising:

an integrity-checking application that checks the integrity of a substitute power-control outlet user configuration file downloaded to the memory disposed in the power-distribution apparatus and facilitates rejection of a corrupted file transfer.

6. (Currently Amended) The system of claim 1, further comprising:

an integrity-checking application that checks the integrity of a substitute power-control outlet user configuration file downloaded to the memory disposed in the power-distribution apparatus and facilitates adoption of an acceptable file transfer.

7. (Currently Amended) The system of claim 1, further comprising:
[[an]] a configuration editor application that allows for construction of a substitute
power-control outlet user configuration file.

8. (Currently Amended) The system of claim 1, further comprising:
[[an]] a configuration editor application that allows for modification of the power-control
outlet user configuration file into a substitute power-control outlet user configuration file.

9. (Currently Amended) The system of claim 1, further comprising:
a network software conversion agent in communication with a remote power manager at
the remote user system, whereby the network software conversion agent converts software
commands communicated as TCP/IP packets into signals that can be understood by the remote
power manager;
a command mechanism in communication with the power-control outlet user
configuration file transfer mechanism, whereby the command mechanism recognizes a first user
command to upload the power-control outlet user configuration file from the memory disposed
in the power-distribution apparatus to a destination and recognizes a second user command to
download a substitute power-control outlet user configuration file to the memory disposed in the
power-distribution apparatus from a source;

a transfer mechanism, whereby the transfer mechanism checks the integrity of the
substitute power-control outlet user configuration file downloaded to the memory disposed in the
power-distribution apparatus and rejects a corrupted file transfer, and whereby the transfer
mechanism also checks the integrity of the substitute power-control outlet user configuration file
downloaded to the memory disposed in the power-distribution apparatus and adopts for use an
acceptable file transfer; and

an editor application, whereby the editor application allows for modification of the
power-control outlet user configuration file into a substitute user configuration file.

10. (Currently Amended) A method of managing user configuration data in a reconfigurable network-equipment power-management and distribution system, the method comprising the steps of:

providing power to one or more separate electronic appliances through a plurality of power-control outlets disposed in a local power-distribution apparatus;

remotely controlling the plurality of power-control outlets disposed in the local power-distribution apparatus with a remote control application; ~~the plurality of power-control outlets, whereby the plurality of power-control outlets may be affected by a user-configuration file;~~

~~transferring a power-control outlet user configuration file to the local power-distribution apparatus, the power-control outlet user configuration file comprising user configuration data for each of the plurality of power-control outlets disposed in the local power-distribution apparatus;~~

uploading a copy of the power-control outlet user configuration file to the remote control application from the local power-distribution apparatus over a data communication channel; and

downloading a substitute power-control outlet user configuration file from the remote control application to the local power-distribution apparatus over the data communication channel, wherein the substitute power-control outlet user configuration file may replace the power-control outlet user configuration file.

11. (Currently Amended) The method of claim 10, further comprising the step of:

checking the integrity of the power-control outlet user configuration file and aborting the uploading step if corrupted.

12. (Currently Amended) The method of claim 10, further comprising the step of:

checking the integrity of the power-control outlet user configuration file and adopting it for use if not corrupted.

13. (Currently Amended) A remote power manager system in communication with a distal power manager application through a data communications network, the remote power manager system comprising in combination:

A. a remote power manager having power input connectable to a power network that provides power to be distributed to associated electronic devices, a plurality of power-control power output ports connectable to the associated electronic devices, a power controller in power controlling communication with the plurality of power-control power output ports, a data communications network port system in communication with the power controller and being connectable to the data communications network, and a power manager memory providing storage for a power-control power output port user configuration file, the power-control power output port user configuration file comprising user configuration data for each of the plurality of power-control power output ports; and

B. a power-control power output port user configuration file transfer application providing for selectively importing a power-control power output port user configuration file from the distal power manager application through the data communications port system to the power manager memory, or exporting the power-control power output port user configuration file from the power manager memory through the data communications network port system to the distal power manager application over the data communications network.

14. (Currently Amended) The remote power manager system of claim 13, wherein the power-control power output port user configuration file comprises at least one user-assigned name for at least one of the plurality of power-control power output ports.

15. (New) The system of claim 1, wherein the power-distribution apparatus comprises a housing mountable to an electrical equipment rack.

16. (New) The system of claim 15, wherein the housing comprises a vertical housing vertically mounted to the electrical equipment rack.

17. (New) The method of claim 15, wherein the one or more separate electrical appliances are mounted in the electrical equipment rack or another electrical equipment rack

18. (New) The system of claim 17, wherein the plurality of power-control outlets are in active power supply communication with the one or more separate electronic appliances.

19. (New) The remote power manager system of claim 13, wherein the plurality of power-control power output ports and the power controller in power controlling communication with the plurality of power-control power output ports are disposed in a power distribution apparatus housing.

20. (New) The remote power manager system of claim 19, wherein the power distribution apparatus housing is mountable in an electrical equipment rack and the associated electronic devices are mounted in the electrical equipment rack.